

CLAIMS

What is claimed is:

1. A connector system comprising:
  - a. a first wiring board having:
    - i. a first wiring-board surface supporting a first plurality of conductors; and
    - ii. a second wiring-board surface extending in a first plane and supporting a second plurality of conductors;
    - iii. wherein at least one of the first plurality of conductors is electrically connected to a corresponding one of the second plurality of conductors;
  - b. a second wiring board having a third wiring-board surface extending in a second plane substantially perpendicular to the first plane and supporting a third plurality of conductors;
  - c. an elastomeric conductor disposed between the first and second wiring boards in contact with ones of the second and third pluralities of conductors; and
  - d. a support connected to the first and second wiring boards and holding the elastomeric conductor against the second and third wiring-board surfaces.
2. The connector system of claim 1, wherein the support clips to the first wiring board.
3. The connector system of claim 1, further comprising a third wiring board having a fourth wiring-board surface extending in parallel with the second plane and supporting a fourth plurality of conductors, wherein at least one of the fourth plurality of conductors electrically connects to at least one of the third

plurality of conductors via the elastomeric conductor.

4. The connector system of claim 1, wherein the first plurality of conductors are concentric.
5. The connector system of claim 1, wherein the first wiring board further includes recesses receiving the support.
6. The connector system of claim 1, further comprising a housing encompassing the first and second wiring boards.
7. The connector system of claim 6, the housing including an interior protrusion, the first wiring board further comprising recesses providing clearance for bypassing the protrusion.
8. The connector system of claim 6, further comprising a second conductor contacting the housing and at least one of the third plurality of conductors.
9. The connector system of claim 8, wherein the second conductor is elastomeric.
10. The connector system of claim 8, wherein the support holds the second conductor against the housing.
11. The connector system of claim 1, further comprising at least one fastener attaching the support to the second wiring board.
12. The connector system of claim 1, further comprising a second elastomeric conductor disposed against the first plurality of conductors.

13. The connector system of claim 12, further comprising a retainer disposed against the first plurality of conductors and supporting the second elastomeric conductor.
14. A water monitoring system comprising:
  - a. a cylindrical component housing having a sensor end and a cable end;
  - b. a sensor assembly connected to the sensor end of the housing, the sensor assembly including a connector half; and
  - c. a circuit module disposed within the housing and including:
    - i. a first wiring board having:
      - 1) a first wiring-board surface supporting a first plurality of conductors in physical contact with the connector half of the sensor assembly; and
      - 2) a second wiring-board surface supporting a second plurality of conductors, wherein at least one of the first plurality of conductors is electrically connected to a corresponding one of the second plurality of conductors;
    - ii. a second wiring board having a third wiring-board surface extending in a second plane substantially perpendicular to the first plane and supporting a third plurality of conductors;
    - iii. an elastomeric conductor disposed between the first and second wiring boards in contact with ones of the second and third pluralities of conductors; and
    - iv. a support connected to the first and second wiring boards and holding the elastomeric

conductor against the second and third wiring-board surfaces.

15. The connector system of claim 14, wherein the support clips to the first wiring board.
16. The connector system of claim 14, wherein the circuit module further includes a third wiring board having a fourth wiring-board surface extending in parallel with the second plane and supporting a fourth plurality of conductors, wherein at least one of the fourth plurality of conductors electrically connects to at least one of the second and third pluralities of conductors via the elastomeric conductor.
17. The connector system of claim 14, wherein the first plurality of conductors are concentric.
18. The connector system of claim 6, the housing including an interior protrusion, the first wiring board further comprising recesses providing clearance to bypass the protrusion.
19. The connector system of claim 6, further comprising a second conductor contacting the housing and at least one of the third plurality of conductors.
20. The connector system of claim 8, wherein the second conductor is elastomeric.